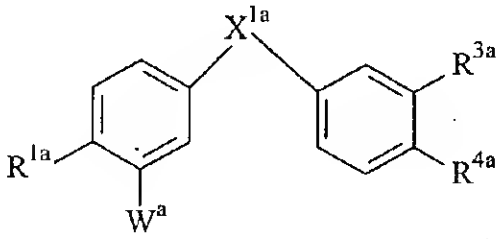
IN THE CLAIMS

Please amend the claims as shown on the marked-up copy following this amendment to read as follows.

A1

3. (Amended) A compound or a salt thereof according to Claim 1, wherein N_1 constituting the pharmacophore is a nitrogen atom of unsubstituted or substituted amino, ammonium, amido, thioamido, ureido, isoureido, amidino, guanidino, thioureido, hydrazino or hydrazono group to which one or more hydrogen atoms are bonded, a carbon atom of ethenyl group to which a hydrogen atom is bonded, an oxygen atom of carbonyl group, a sulfur atom of thiocarbonyl group, a nitrogen atom of unsubstituted or substituted imino group, an oxygen atom of sulfonyl group, an oxygen atom of sulfonyloxy group, an oxygen atom of sulfo group, an oxygen atom of sulfinyl group, an oxygen atom of carboxyl group, an oxygen atom of ether, a sulfur atom of thioether, a sulfur atom of mercapto group, an oxygen atom of hydroxyl group, an oxygen atom of ester or a nitrogen atom of unsubstituted or substituted nitrogen-containing heterocyclic group; N_3 is an oxygen atom of carbonyl group, a sulfur atom of thiocarbonyl group, a nitrogen atom of unsubstituted or substituted imino group, an oxygen atom of sulfo group, an oxygen atom of sulfonyl group, an oxygen atom of sulfo group, an oxygen atom of sulfonyloxy group, an oxygen atom of carboxyl group, an oxygen atom of ether, a sulfur atom of thioether, an oxygen atom of hydroxyl group, an oxygen atom of ester, a nitrogen atom of unsubstituted or substituted nitrogen-containing heterocyclic group to which no hydrogen atom is combined, a nitrogen atom of sulfonamido group or a nitrogen atom of acylsulfonamido group; and each of N_2, N_4 and N_5 is an arbitrary carbon atom constituting a carbon atom of alkyl group, a carbon atom of alkenyl group, a carbon atom of aryl group and a carbon atom of alkoxy group.

16. (Amended) A benzene derivative represented by the following formula:



wherein R^{1a} represents a halogen atom, a cyano group, a nitro group, an unprotected or protected hydroxyl group, a mercapto group or an unsubstituted or substituted alkyl, alkenyl, cycloalkyl, aryl, aralkyl, alkoxy, aryloxy, acyl, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, acylamino, alkylsulfonylamino, arylsulfonylamino or heterocyclic group; R^{3a} and R^{4a} may be the same or different represent a halogen atom, a cyano group, a nitro group, an unprotected or protected carboxyl group, an unprotected or protected hydroxyl group, an unprotected or protected amino group, a mercapto group or an unsubstituted or substituted alkyl, alkenyl, cycloalkyl, aryl, aralkyl, alkoxy, aryloxy, acyl, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, acylamino, alkylsulfonylamino, arylsulfonylamino or heterocyclic group; X^{1a} represents -C(O)-, -CH(OH)-, $-CH_2-$ or a group of the following formula:

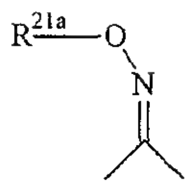
4. (Amended) A compound or a salt thereof according to Claim 1, wherein a compound having an atom corresponding to N_3 and atoms corresponding to two or more atoms sclected from N_1, N_2, N_4 and N_5 among the atoms N_1, N_2, N_3, N_4 and N_5 constituting a pharmacophore, and, in the optimized three-dimensional structure thereof, the interatomic distances between the atom corresponding to N_3 and the two or more atoms selected from N_1, N_2, N_4 and N_5 are the atomic distances of a pharmacophore has an activity of antagonistically inhibiting the binding between AP-1 (activator protein-1) and a recognition sequence thereof.

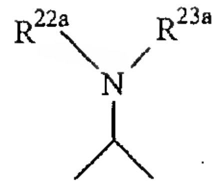
--5. (Amended) A peptide of 10 residues represented by the following amino acid sequence:

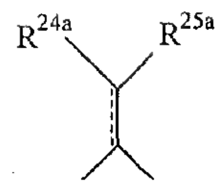
Ac-Cys^1-Gly^2-AA^3-AA^4-AA^5-AA^6-AA^7-AA^8-Gly^9-Cys^{10}-NH_2 [SEQ ID NO:1]

wherein Ac represents an acetyl group, AA^3 represents a polar amino acid residue, each of AA^4, AA^6 and AA^7 represents a hydrophobic amino acid residue, AA^5 represents an amino acid residue having carboxyl or hydroxyl group in the side chain thereof, and AA^8 reprcsents an arbitrary amino aeid residue; said peptide having a disulfide linkage between the first and tenth eysteine residues; or a salt thereof.--

6. A peptide or a salt thereof according to Claim 5, wherein AA^3 is an L-asparagine residue or an L-glutamine residue; AA^4, AA^6 and AA^7 are an L-leucine residue, an L-isoleucine residue, an L-alanine residue or an L-valine residue; and AA^5 is an L-aspartic acid residue, an L-glutamic acid residue, an L-serine residue or an L-threonine residue.

 ,

 or



wherein R^{21a} represents an unsubstituted or substituted alkyl, alkenyl, cycloalkyl, aryl, aralkyl, acyl or heterocycle-lower alkyl group; R^{22a} and R^{23a} may be the same or different represent a hydrogen atom or an unsubstituted or substituted alkyl, alkenyl, cycloalkyl, aryl, aralkyl, acyl, carbamoyl, alkylsulfinyl, alkylsulfonyl, arylsulfonyl or heterocyclic group; R^{24a} and R^{25a} may be the same or different represent a hydrogen atom, a halogen atom, a cyano group, a nitro group, an unprotected or protected carboxyl group, an unprotected or protected hydroxyl group, an unprotected or protected amino group, a mercapto group or an unsubstituted or substituted alkyl, alkenyl, cycloalkyl, aryl, aralkyl, alkoxy, aryloxy, acyl, alkoxycarbonyl, aryloxycarbonyl, carbamoyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, acylamino, alkylsulfonylamino, arylsulfonylamino or heterocyclic group; and the double line of which one line is a broken line represents a single bond or a double bond and W^a represents $-Z^a-COR^{26a}$, $-Z^a-COOR^{2a}$, $-O-CH_2COOR^{2a}$ or $-O-CH_2CH_2COOR^{2a}$ (wherein Z^a represents $-(CH_2)n^a-$ (n^a is 1, 2 or 3), $-CH_2CH(CH_3)-$, $-CH=CH-$ or $-CH_2CH=CH-$; R^{2a} represents a hydrogen atom or a protecting group for carboxyl group; and R^{26a} represents $-NHR^{27a}$ or $-NHSO_2R^{28a}$ (R^{27a} and R^{28a} independently represent an unsubstituted or substituted alkyl, alkenyl, cycloalkyl, aryl or aralkyl group));

or a salt thereof.

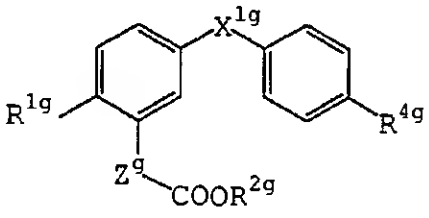
--7. (Amended) A peptide of 10 or 11 residues represented by the following amino acid sequence:

Ac-aa^0-Cys^1-Gly^2-aa^3-aa^4-aa^5-aa^6-aa^7-Gly^8-aa^9-Cys^{10}-NH_2 [SEQ ID NO:2]

wherein Ac represents an acetyl group, aa^0 represents an arbitrary amino acid residue or a bonding unit, aa^3 represents a polar amino acid residue, each of aa^4, aa^5 and aa^7 represents a hydrophobic amino acid residue, aa^6 represents an arbitrary amino acid residue, and aa^9 represents an amino acid residue having carboxyl or hydroxyl group in the side chain thereof; provided that, when aa^0 is a bonding unit, said peptide has a disulfide linkage between the first and tenth cysteine residues and, when aa^0 is an arbitrary amino acid residue, said peptide has a disulfide linkage between the second and eleventh cysteine residues; or a salt thereof.--

represent an unsubstituted or substituted alkyl group; X^{1f} is -C(O)-; and Z^f is $-CH_2-$.

28. A benzene derivative represented by the following general formula:



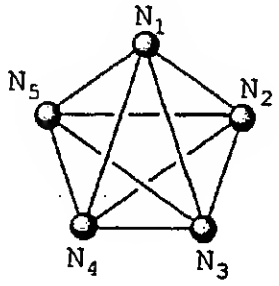
wherein R^{1g} and R^{4g} may be the same or different represent an unprotected or protected hydroxyl group or an unsubstituted or substituted alkoxy group; X^{1g} is -C(O)-, -CH(OH)- or $-CH_2-$; Z^g is $-(CH_2)_{n^g}-$ (n^g represents 1 or 2); and R^{2g} is a hydrogen atom or a protecting group for carboxyl group;

or a salt thereof.

29. (Amended) A compound or a salt thereof according to Claim 9, wherein said compound is a compound that has an activity of antagonistically inhibiting the combination between AP-1 and a recognition sequence thereof.

administering a compound or a salt thereof according to any one of Claims 1 to 30.

30. (Amended) A compound comprising the atom corresponding to N_3 and the two or more atoms selected from N_1, N_2, N_4 and N_5, said atoms constitute the pharmacophore represented by the following formula 1:



[1]

wherein N_1 represents an atom to which a donative hydrogen atom in a hydrogen-bond donating group is bonded or a hydrogen-bond accepting atom in a hydrogen-bond accepting group; N_3 represents a hydrogen-bond accepting atom in a hydrogen-bond accepting group; and N_2, N_4 and N_5 independently represent an arbitrary carbon atom constituting a hydrophobic group and the distance between N_1 and N_2 is not less than 5 angstroms and not more than 12 angstroms, the distance between N_1 and N_3 is not less than 9 angstroms and not more than 15 angstroms, the distance between N_1 and N_4 is not less than 3 angstroms and not more than 13 angstroms, the distance between N_1 and N_5 is not less than 8 angstroms and not more than 16 angstroms, the distance between N_2 and N_3 is not less than 3 angstroms and not more than 10 angstroms, the distance between N_2 and N_4 is not less than 6 angstroms and not more than 14 angstroms, the distance between N_2 and N_5 is not less than 9 angstroms and not more than 14 angstroms, the distance between N_3 and N_4 is not less than 4 angstroms and not more than 11 angstroms, the distance between N_3 and N_5 is not less than 3 angstroms and not more than 10 angstroms, the distance between N_4 and N_5 is not less than 4 angstroms and not

more than 9 angstroms; and, in the optimized three-dimensional structure thereof, the distances between the atom corresponding to N_3 and the two or more atoms selected from N_1, N_2, N_4 and N_5 are the interatomic distances in the pharmacophore; and a salt thereof, wherein the compound conforming to a pharmacophore is a peptide or a benzene derivative according to Claim 9.

31. (Amended) A method for inhibiting AP-1 which comprises administering a compound or a salt thereof according to Claim 1.

32. (Amended) An agent for preventing and treating a disease into which an excessive expression of AP-1 participates, which comprises a compound or a salt thereof according to Claim 1.

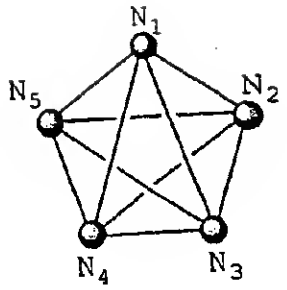
33. (Amended) An agent for preventing and treating an autoimmune disease, which comprises a compound or a salt thereof according to Claim 1.

34. (Amended) An AP-1 inhibitor comprising a compound or a salt thereof according to Claim 1.

Please add new Claims 35-40 as follows:

35. (New) A compound or a salt thereof according to Claim 9, wherein said compound is a compound that has an activity of antagonistically inhibiting the combination between AP-1 and a recognition sequence thereof.

36. (New) A compound comprising the atom corresponding to N_3 and the two or more atoms selected from N_1, N_2, N_4 and N_5, said atoms constitute the pharmacophore represented by the following formula 1:



[1]

wherein N_1 represents an atom to which a donative hydrogen atom in a hydrogen-bond donating group is bonded or a hydrogen-bond accepting atom in a hydrogen-bond accepting group; N_3 represents a hydrogen-bond accepting atom in a hydrogen-bond accepting group; and N_2, N_4 and N_5 independently represent an arbitrary carbon atom constituting a hydrophobic group and the distance between N_1 and N_2 is not less than 5 angstroms and not more than 12 angstroms, the distance between N_1 and N_3 is not less than 9 angstroms and not more than 15 angstroms, the distance between N_1 and N_4 is not less than 3 angstroms and not more than 13 angstroms, the distance between N_1 and N_5 is not less than 8 angstroms and not more than 16 angstroms, the distance between N_2 and N_3 is not less than 3 angstroms and not more than 10 angstroms, the distance between N_2 and N_4 is not less than 6 angstroms and not more than 14 angstroms, the distance between N_2 and N_5 is not less than 9 angstroms and not more than 14 angstroms, the distance between N_3 and N_4 is not less than 4 angstroms and not more than 11 angstroms, the distance between N_3 and N_5 is not less than 3 angstroms and not more than 10 angstroms, the distance between N_4 and N_5 is not less than 4 angstroms and not more than 9 angstroms; and, in the optimized three-dimensional structure thereof, the distances between the atom corresponding to N_3 and the two or more atoms selected from N_1, N_2, N_4 and N_5 are the interatomic distances in the pharmacophore; and a salt thereof, wherein the compound conforming to a pharmacophore is a peptide or a benzene derivative according to Claim 9.

37. (New) A method for inhibiting AP-1 which comprises administering a compound or a salt thereof according to Claim 9.

38. (New) An agent for preventing and treating a disease into which an excessive expression of AP-1 participates, which comprises a compound or a salt thereof according to Claim 9.

39. (New) An agent for preventing and treating an autoimmune disease, which comprises a compound or a salt thereof according to Claim 9.

40. (New) An AP-1 inhibitor comprising a compound or a salt thereof according to Claim 9.